IFW

	TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT (Under 37 CFR 1.97(b) or 1.97(c) BerganoC3					
In Re Application Of: Neil S. Bergano  JUN 0 7 2004						
Examiner	Group Art Unit					
Title: SYNCHRONOUS AMPLITUDE MODULATION FOR IMPROVED PERFORMANCE OF OPTICAL TRANSMISSION SYSTEMS						
to: r for Patents c 1450 . 22313-1450						
<ol> <li>The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application other than a continued prosecution application under 37 CFR 1.53(d); within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.</li> </ol>						
1.97(c)						
2.  The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:						
☐ the fee set forth in 37 CFR 1.17(p).						
	to: for Patents (1450 22313-1450 1.97(b) ewith is being filed within three secution application under 3 ge as set forth in 37 CFR 1.4 on the merits, or before the renation under 37 CFR 1.114. 1.97(c) ewith is being filed after the re Statement is filed before owance under 37 CFR 1.3					

TRANSMITTAL OI	Docket No. BerganoC3					
In Re Application: Neil S. Bergano						
Serial No.	Filing Date	Examiner	Group Art Unit			
10/689,484	10/20/2003					
SYNCHRONOUS AMPLITUDE MODULATION FOR IMPROVED PERFORMANCE OF OPTICAL TRANSMISSION SYSTEMS						
	Payı	ment of Fee				
	(Only complete if Applicant ele	ects to pay the fee set forth in 37 (	CFR 1.17(p))			
as described belo Charge the Credit and Charge at Certificate of	ereby authorized to charge and cow.  the amount of any overpayment.  any additional fee required.  Transmission by Facsimile*  ment and authorization to charge depositional transmitted to the United States	Certificate of Maili  I certify that this docume on June 4, 2004 as first class mail un addressed to the Commis 1450, Alexandria, VA 22	ing by First Class Mail  Int and fee is being deposited with the U.S. Postal Service der 37 C.F.R. 1.8 and is ssioner for Patents, P.O. Box 313-1450.			
		Jennifer L. Hobbs	Charles William Contidents			
	*This certificate may only be used if paying by deposit account.					
Donald J. Pepreault Attorney for Applicant						
Reg. No. 40,126						
Grossman, Tucker, Perreault & Pfleger, PLLC 55 South Commercial Street						
Manchester, NH 03101						
CUSTOMER NO. 32047						

Docket Number (Optional) Application Number BerganoC3 10/689,484 Applicant(s) (Use several sheets Bergano necessary) Filing Date **Group Art Unit** JUN 0 7 2004 10/20/2003 U.S. PATENT DOCUMENTS EXAMINER DATE FILING DATE NAME CLASS SUBCLASS INITIAL IF APPROPRIATE 4,190,802 02/26/1980 Levine 325 320 4,829,598 05/09/1989 Auracher et al 455 619 5,050,176 09/17/1991 Naito et al 372 26 5,115,332 05/19/1992 Naito et al 359 189 5,228,043 07/13/1993 Naito et al 372 32 5,319,438 06/07/1994 Kiasaleh 356 345 5,463,461 10/31/1995 Horiuchi et al 356 349 5,543,952 08/06/1996 Yonenaga et al 359 181 6,396,605 05/28/2002 Heflinger et al 359 154 6,559,996 05/06/2003 Miyamoto et al 359 181 2003/0002121 01/02/2003 Miyamoto et al 359 183 06/26/2002 FOREIGN PATENT DOCUMENTS REF DOCUMENT NUMBER DATE Translation COUNTRY CLASS SUBCLASS YES NO OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) Atia et al; "Demonstration of Return-to-Zero Signaling in Both OOK and DPSK Formats to Improve Receiver Sensitivity in an Optically Preamplified Receiver"; 1999; IEEE, pp. 226-227. Abbas et al; "Local-Oscillator Excess-Noise Suppression for Homodyne and Heterodyne Detection"; Aug. 1983; Optics Letters, Vol. 8, No. 8; pp. 419-421.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

## INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)	Application Number		
BerganoC3	10/689,484		
Applicant(s)			
Bergano			
Filing Date	Group Art Unit		
10/20/2003			

					10/20/2		Group Art Out		
				U.S. PAT	ENT DOCUMENTS				
*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	FILING IF APPRO	G DATE OPRIATE
		2003/0007216	01/09/2003	Chraply	yvy et al	359	161	11/21/20	
		2003/0007231	01/09/2003	Winzer		359	245	04/26/20	)02
		2003/0090768	05/15/2003	Liu et a	1	359	183	11/21/20	)01
		2003/0210912	11/13/2003	Leuthol	d et al	398	188	05/13/20	)02
									-
•									
				FOREIGN	N PATENT DOCUME	NTS			
	REF	DOCUMENT NUMBER	DATE		COUNTRY		SUBCLASS		slation
						-	-	YES	NO
			+	<u> </u>					
								<del>                                     </del>	
			<u> </u>	-		-,,,,,			
				<b>-</b>					
				OTHER I	DOCUMENTS (Incli	uding Author, Title, I	Date, Pertinent Pa	ges, Etc.)	<u>t</u>
		Yonenaga et al; "Redu Using Optical DPSK"	ection of Four-Way Nov. 7, 1996; Elec	ve Mixing latronics Let	Induced Penalty in Utters; Vol. 32, No. 23	Jnequally Spaced V	VDM Transmis	ssion Syster	n by
		Swanson et al; "High S Stabilization"; Feb. 19	Swanson et al; "High Sensititivity Optically Preamplified Direct Detection DPSK REceiver with Active Delay-Line Stabilization"; Feb. 1994; IEEE Photonics Technology Letters, Vol. 6, No. 2, pp. 263-265.						
EXAMINEI	AMINER DATE CONSIDERED				DATE CONSIDEREI	D			

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

## INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

	Docket Number (Optional)	Application Number
	BerganoC3	10/689,484
	Applicant(s)	
	Bergano	
	Filing Date	Group Art Unit
	10/20/2003	

*EXAMINER	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
INITIAL	OAMEN DOCUMENTO (Including Abinot) Time, Dute, I etiment I ages, Lite)		
	Yonenaga et al; "Dispersion Compensation for Homodyne Detection Systems Using a 10-Gb/s Optical PSK-VSB Signal"; Aug. 1995; IEEE Photonics Technology Letters, Vol. 7, No. 8, pp. 929-931.		
	Abbas et al; "A Dual-Detector Optical Heterodyne Receiver for Local Oscillator Noise Suppression"; Oct. 1985; Journal of Lightwave Technology; Vol. LT-3, No. 5; pp. 1110-1122.		
	Koyama et al; "Frequency Chirping in External Modulators"; Jan. 1988; Journal of Lightwave Technology; Vol. 6, No. 1; pp. 87-93.		
	Park et al; "Crosstalk in a Two-Channel Coherent Fiber Optic ASK System Using an Optical Amplifier and Non-Negligible Linewidth Lasers"; Jan. 1988; Optical Fiber Communications Conference; pp. PD19-1 - PD19-5.		
•	Gordon et al; "Phase Noise in Photonic Communications Systems Using Linear Amplifiers"; Dec. 1990, Optics Letters; Vol. 15, No. 23; pp. 1351-1353.		
	Gordon et al; "Effects of Fiber Nonlinearities and Amplifier Spacing on Ultra-Long Distance Transmission"; Feb. 1991; Journal of Lightwave Technology, Vol. 9, No. 2; pp. 170-173.		
	Linke et al; "High-Capacity Coherent Lightwave Systems"; Nov. 1988; Journal of Lightwave Technology; Vol. 6, No. 11; pp. 1750-1769.		
	Jacobsen et al; "Theory for Optical Heterodyne DPSK Receivers with Post-Detection Filtering"; April 1987; Journal of Lightwave Technology; Vol. LT-5, No. 4; pp. 478-484.		
•	Elec. Let. October 22, 1987; Vol. 23, No. 22, pp. 1180-1181		
	OFC 1997 Technical Digest; pp. 331-332		
	Swanson et al; "Optically Preamplified 3 Gb/s DPSK Receiver with 80 Photons/bit Sensitivity"; OFC 1993; pp. 119-122.		
	R.S. Vodhanel; "5 Gbit/s Direct Optical DPSK Modulation of a 1530-nm DFB Laser"; August 1989; "IEEE Photonics Technology Letters, Vol. 1, No. 8; pp. 218-220.		
EXAMINER	DATE CONSIDERED		
AEV AMINIED. I	sitial if situation considered substitution in the situation in the format of the NATED Co. 41 - COO. D It is the situation if not to a format of the situation in the situ		

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

## INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)	Application Number
BerganoC3	10/689,484
Applicant(s)	
Bergano	
Filing Date	Group Art Unit
10/20/2003	

		10/20/2003			
*EXAMINER OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)					
	Gnauch et al; "2.5 Tb/s (64x42.7 Gb/s) Transmission Over 40x100 km NZDSF Using RZ-DPSK Format and All-Raman-Amplified Spans"; OFC 2002; pp. FC2-1 - FC2-3.				
	Shum et al; "Analysis of a DPSK Soliton Transmission System 411-414.	em"; 1997; Optics & Laser To	echnology, Vol. 29, No. 7; pp.		
	Kim et al; "Experimental Investigation of the Performance 2003; IEEE Photonics Technology Letters; Vol. 15, No. 2; p	Limitation of DPSK Systems   p. 320-322.	Due to Nonlinear Phase Noise"; Feb.		
	Vassilieva et al; "Numerical Comparison of NRZ, CS-RZ an IEEE; pp. 673-674.	nd IM-DPSK Formats in 43 G	bit/s WDM Transmission"; 2001;		
•	Chinn et al; "Sensitivity of Optically Preamplified DPSK Receivers with Fabry-Perot Filters"; March 1996; Journal of Lightwave Technology, Vol. 14, No. 3; pp. 370-376.				
	Wei et al; "Q Factor in Numerical Simulations of DPSK with Optical Delay Demodulation" pp. 1-3				
	Xu et al; "Comparison of Return-to-Zero Differential Phase-Shift Keying and On-Off Keying in Long-Haul Dispersion Managed Transmission"; April 2003; IEEE Photonics Technology Letters, Vol. 15, No. 4; pp. 617-619\.				
	Leibrich et al; "CF-RZ-DPSK for Suppression of XPM on Dispersion-Managed Long-Haul Optical WDM Transmission on Standard Single-Mode Fiber"; Feb. 2002; IEEE Photonics Technology Letters, Vol. 14, No. 2; pp. 155-157.				
	Chikama et al; "Modulation and Demodulation Techniques in Optical Heterodyne PSK Transmission Systems"; March 1990 Journal of Lightwave Technology, Vol. 8, No. 3, pp. 309-322.				
•	Yamazaki et al; "A 1.2 Gb/s Optical DPSK Heterodyne Detection Transmission System Using Monolithic External Cavity-DFB LDs"; Jan. 1987; Optical Fiber Communication Conference; pp. 48-51.				
	Vodhanel et al; "Performance of Directly Modulated DFB Lasers in 10-Gb/s ASK, FSK, and DPSK Lightwave Systems"; Sept. 1990; Journal of Lightwave Technology, Vol. 8, No. 9, pp. 1379-1386				
EXAMINER	DATE C	CONSIDERED			

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.